Weyerhaeuser

Environment Health & Safety, WTC 2G2
PO Box 9777
Federal Way, WA 98063-9777
Telephone: (253) 924-3746
Fax: (253) 924-6182
E-Mail: Jennifer.hale@weyerhaeuser.com

October 16, 2007

Mr. Sam Chummar, Remedial Project Manager
U.S. Environmental Protection Agency - Region 5
Superfund Division - Remedial Response Branch #1
77 W. Jackson Blvd. (SR-6J)
Chicago, IL 60604

Subject: Response to Comments – Letters Dated October 10, 2007 and October 15, 2007
Plainwell Mill, Operable Unit No. 7, Allied Paper, Inc./Portage Creek/Kalamazoo River Site
Plainwell Mill Banks Emergency Action Design Report

Dear Sam:

Attached for your use is a summary of responses to your comment letter on the *Plainwell Mill Banks Emergency Action Design Report* dated October 10, 2007. As with the Emergency Action work in the 12th Street Landfill Powerhouse Channel, applicable comments will be integrated into the Final Plainwell Mill Banks Emergency Action Design Report to be submitted after your approval of the design activities and concurrently with field work. These changes are noted in the responses to individual comments.

As you recall, the activities described in the Plainwell Mill Banks Emergency Action Design report are being conducted in a manner consistent with applicable provisions of the Settlement Agreement between the Kalamazoo River Study Group, United States Environmental Protection Agency (USEPA) and Michigan Department of Environmental Quality (MDEQ) and the associated Former Plainwell Impoundment Time-Critical Removal Action Design Report (Appendix 4 to the Settlement Agreement). Some of the comments included in your letter appear to request actions beyond the scope of the Plainwell Impoundment TCRA. In response, we have considered your comments and incorporated changes when possible, given the site conditions and time constraints of the Mill bank activities. If changes are not practicable and remain inconsistent with the Plainwell Impoundment TCRA, we have referenced the corresponding section of the Plainwell Impoundment TCRA design report that formed the basis of the work described in the Plainwell Mill Banks Emergency Action approach. If you have additional questions on these responses, please let us know and we can discuss them further.

Comment Letter Dated October 10, 2007

General Comment

1. Weyerhaeuser should be aware that Plainwell Impoundment Time Critical Removal Action (Plainwell Impoundment TCRA) activities are not considered final. Additional work may be required after all RI/FS activities are completed.

   Comment noted

Specific Comments

1. Section 1.1, Page 1, Paragraph 2 - It is unclear as to which "Settlement Agreement" is being referred to in this paragraph. Please identify the referenced settlement agreement.

   The Settlement Agreement was that referenced in Paragraph 2 is the Administrative Settlement Agreement and Order on Consent for Removal Action Docket No. V-W-07-C-863. The sentence will be

amended as follows: ***"... Settlement Agreement (Administrative Settlement Agreement and Order on Consent for Removal Action Docket No. V-W-07-C-863) and the ....."***

2. Section 2.1, Page 5, Paragraph 1 - The text references "containment of the visual paper residuals." No details as to the circumstances under which this would occur are included in the text. Additionally, methods by which visual paper residuals are contained are not included in the text. Please provide details to the circumstances under which containment will occur, and also the methodology for containment.

   The overall goal of the Emergency Action is to take appropriate action to prevent, abate or minimize a potential release. The primary tactic is focused removal of residuals; however, containment can be effective in accomplishing this goal as well, and may be necessary, under some conditions. Thus, consistent with the Plainwell Impoundment TCRA Design Report, the Plainwell Banks Emergency Action Design Report includes a contingency for allowing containment should removal not be practicable or feasible. Specific circumstances as to why excavation would not be feasible will be determined based upon field conditions. In certain locations, the presence of large underground structures may obstruct the removal. In other instances, bank instability or access limitations may limit the ability to safely excavate limited areas of residuals and containment could be the only available option to control potential for releases or future exposure. In other locations, the volume of material targeted for removal may result in upland bank cutbacks that are objectionable to the City of Plainwell and containment offers a more acceptable alternative. These determinations will be made in conjunction with the agency oversight representatives. Containment is expected to consist of placement of 6 inches of clean soil in a manner similar to that proposed in the Plainwell Impoundment TCRA (Section 5.4.3). The soil cover placement is described in Section 2.3.2 of the Plainwell Banks Emergency Action Design Report.

3. Section 2.1, Page 5, Table 1 - The table references "shoreline," which is not defined in the DR. Please refrain from interchangeably using the terms "shoreline" and "bank" in this instance and the remainder of the DR. Also, the "Characteristics" describing Construction Zone B states that there are "no observable floodplain areas." Does this mean that there are no observable floodplains in this area or are there no residuals impacting floodplain areas?

   Shoreline will be changed to river bank. No observable floodplain areas means there are no observable flood plains in this area.

4. Section 2.2 - Please refer to U.S. EPA letter dated September 24, 2007.

   Comments addressed in a letter from Jennifer Hale to Sam Chummar dated September 28, 2007.

5. Section 2.3, Page 10, 9th Bullet - Ensure that all material to be disposed of off site is characterized and disposed of in accordance with the Resource Conservation and Recovery Act as well as the Toxic Substances Control Act.

   All material disposed of off site will be characterized and disposed in accordance with applicable regulations

6. Section 2.3.2, Page 11, Paragraph 1 - The six inch cover layer, if consisting of soil, should consist of clean soil. Appropriate analytical data should accompany any imported soil.

   If soil cover is placed, Emergency Action sampling results will be used to confirm that PCB concentrations are below targeted levels. If soil is imported, PCB concentrations will be evaluated using sampling protocols for characterizing waste piles.

7. Section 2.3.2, Page 11, Paragraph 2 - Historical data should not be used to verify the cleanliness of soil/sediment. Prior to any re-use of excavated soil/sediment, it should be analytically analyzed and then only determined safe to re-use.

   If soil cover is placed, Emergency Action sampling results will be used to confirm that PCB concentrations are below targeted levels.

8. Section 2.3.3, Page 11 - The proposed method for sediment control for sediment excavation activities is the use of vertical silt curtains (the same method currently being used downstream as part of the Plainwell Impoundment TCRA activities). The use of sheet pile with active hydraulic control (*i.e.,* surface water pumped from the removal area) and other sediment controls have been used upstream of the Plainwell Mill (at land based operable units) with proven success. It is recommended Weyerhaeuser evaluate the effectiveness and feasibility of these options for this emergency action.

   Various options are being evaluated as requested. Any additional insights from the Plainwell Impoundment TCRA activities, provided by USEPA or others, will allow a more site specific and expedient evaluation.

9. Section 2.3.3, Page 11 - Does the last sentence in this section indicate the erosion control methods discussed in the text are in general conformance with the MDEQ training manual or that additional soil erosion control methods will be in conformance? If there are additional soil erosion methods, please discuss them in detail.

   These sentences will be added: ***Erosion control methods will be in general conformance with the MDEQ Soil Erosion and Sedimentation Control Training Manual. Additional measures not described in the text include protection of storm water inlets and small runoff diversions.***

10. Section 2.4, Page 12 - After the Emergency Action, interim erosion controls will be placed to protect the banks from "moderate stresses." The term "moderate stresses" must be defined.

    The term moderate stresses will be eliminated from the final design report. Instead the sentence will be revised as follows: ***In the interim, the banks will be stabilized to limit erosion by re-vegetation and/or placement of well-graded 6-inch D50 river-run stone or similar material as approved by the engineer.***

11. Section 3, Page 14, 2nd Bullet - Please change "ARARs" to "substantive requirements of the National Pollutant Discharge Elimination System permit."

    Text will be modified as requested

12. Section 3.1, Page 16, Paragraph 2 - It appears that "silt" should be substituted for "turbidity" in the first sentence. Please verify and correct if necessary.

    Turbidity curtain will be changed to silt curtain

13. Section 3.1, Page 17, Paragraph 2 - It should be specified that the *Multi-Area Field Sampling Plan* and the *Multi-Area Quality Assurance Project Plan,* are being used with site-specific addenda.

    The sentence will be modified to read as follows: PCB waster samples will be collected in accordance with the procedures outlined in the ***amended Multi-Area*** *Field Sampling Plan(FSP) for the site. Analysis will be performed by Weyerhaeuser Analytical Testing Services...in accordance with the* ***amended Multi-Area*** *Quality Assurance Project Plan.*

14. Section 3.2 , Page 17, Paragraph 4 - The U.S. EPA requests monthly reports on the Emergency Action. Additionally, refrain from referring to the Emergency Action as a "removal action," as it is in the second to last sentence of this paragraph.

    The seventh sentence in Paragraph 4 will be amended as follows: Monitoring results will be documented in a field notebook and ***validated results*** *will be reported to the agency* ***monthly and*** *after the completion of the Mill banks residual emergency action. Removal action terminology will be replaced with emergency action*

15. Section 3.3 - Implementation of post-excavation sampling (described in the text as documentation sampling) should be consistent with the *MDEQ Sampling Strategies and Statistics Training Materials* (S3TM) after the excavation is performed. The post-excavation sampling plan must also recognize the potential for biased and unbiased sampling strategies. The U.S. EPA and MDEQ are available to assist in developing a compliant sampling strategy.

    The sampling described in the Plainwell Banks Emergency Action Design Report is consistent with applicable provisions of the Settlement Agreement and the Former Plainwell Impoundment Time-Critical Removal Action Design Report (Appendix 4 to the Settlement Agreement) and reflect the MDEQ Sampling Strategies and Statistics Training Materials (S3TM) in a similar manner. In order to implement the Emergency Action and limit potential releases of hazardous wastes during the 2007/2008 winter and spring season, additional changes are not being contemplated at this time. The sampling activities in the Plainwell Impoundment TCRA Design report are presented in Section 5 Environmental Monitoring Plan.

16. Section 3.4, Page 19, Paragraph 3 - Currently, U.S. EPA is not aware of the timeframe in which the City of Plainwell plans to install permanent erosion controls. Please coordinate the restorative efforts and erosion control with the City of Plainwell to ensure the bank areas are protected from erosion and failure until permanent measures are implemented.

    Weyerhaeuser and the City of Plainwell are working together to prepare the Mill banks area for a future riverwalk as expeditiously as possible.

17. Section 3A, Page 19, Paragraph 5- A schedule for monitoring (maintenance) work should be provided. The U.S. EPA recommends quarterly monitoring along with additional monitoring subsequent to any high precipitation events (a rainfall of 3.25 inches over 24 hours is being used at the Georgia-Pacific Kalamazoo Mill and Former Hawthome Mill). A report of any monitoring should be submitted within 30 calendar days, and any deficiencies noted should be reported within 24 hours of their discovery. The U.S. EPA and MDEQ should be notified approximately one month prior to a quarterly monitoring and as soon as possible of any monitoring conducted due to high precipitation events.

    The proposed annual monitoring program is in place for two years or until the riverwalk is completed. The plan is generally consistent with Section 5.6.2 of the Plainwell Impoundment TCRA Design Report and will be amended in the final design report to include an inspection after the suggested rainfall event (3.25 inches over 24 hours) as one of the annual monitoring activities. The Plainwell Mill bank reconfiguration is intended to provide a slope of equal or greater stability than the current configuration and is an interim measure until completion of the riverwalk by the City of Plainwell.

18. Table 3 - Under the wastewater treatment system discharge monitoring section, flow row, which outfall is being referenced by "Effluent to Outfall 001?" Also, the Total Phosphorus being monitored does not have monthly or daily maximum concentrations in the NPDES permit application (Appendix E).

    The outfall locator map from the NPDES is attached, the general location is included in attached Figure E-1. For Phosphorus, all that is required is to "report" the concentration of the monthly grab sample. Phosphorus is a constituent that the water division wants periodically monitored. However, phosphorus is not a contaminant of concern based on our analysis so we aren't required to have information about phosphorus in our NPDES equivalency application.

19. Figures 4, 5, 6, and 7 - Please include the size and type of the rip-rap.

    The Erosion protection measures for each zone are described in detail in Appendix D. The proposed erosion protection rip rap is 6-inch D50 well-graded river run stone. Figures D-2, D-3, D-4 and D-5 show the planned placement location for the rip rap in each zone.

20. Figure 6 - From this figure, it appears that there is a discontinuity in the work platform between Zones B and C. It is unclear if this is an error. Please verify and correct if necessary.

    The figure is correct. There presently is a concrete outfall structure in this area that will require us to work around. Bank areas will be accessed from each side of the concrete structure.

21. Page B-1, Objectives, Bullet 3 - Please clarify that the PCBs above 4 ppm were discovered during previous studies.

    Wording will be changed to indicate PCB concentrations above 4 ppm were from previous studies

22. Page B-1, Outcome - The number of sediment samples taken listed here are inconsistent with the number of sediment samples listed in paragraph three of page one on Section 1.1.

    There were 12 sediment samples collected. Appendix B will be modified.

23. Page B-2, Bullets - There are only three objectives on this page, but on the previous page there are five listed.

    Objectives 2-4 on page one, are combined into one objective (# 2) within the text. The text stating objectives will be reworded to match the objectives on page one.

24. Page B-2, Paragraph 2 - There is a typo in the fourth sentence, "reminder" should be "remainder."

    Reminder will be changed to Remainder

25. Page B-3, Paragraph 5- It is unclear if the last sentence of this paragraph is stating that there are no floodplain areas located in Zone B or that no floodplain areas in Zone B have paper residuals. Please clarify.

    The text will be clarified to state that there were no observable floodplain areas present in Zone B.

26. Page B-4, Paragraph 3 - See comment above.

    The text will be clarified to state that there were no observable floodplain areas present in Zone D.

27. Page B-5, Sediment Probes Near Zone A and Outfall Locations - An explanation should be included as to why these areas were targeted for sediment probes, and not other areas.

    The following explanation will be added to the Design Text: ***Zone A contains a large quantity of residuals that are visible immediately along the water's edge. There was concern by MDEQ that these deposits may extend out from the bank further into the river/sediment. To address this concern sediment cores were placed in this area. The sediment near any outfalls was also targeted due to potential of residuals to accumulate from historic discharges.***

28. Page B-5, Paragraph 4 - Please include the exact number of borings.

Thirty-nine borings were advanced along the bank. The word "approximate" will be removed.

29. Page C-1, Preliminary Outcome - Please discuss the reason as to why these two outfalls were identified.

The text will be amended to add the following: ***These outfalls are not associated with stormwater discharge and therefore can be abandoned without affecting site operations. Other outfall sources are unknown at this time and will require evaluation prior to action.***

30. Page C-3, Bullets at bottom of page - Outfalls listed here are not identified in Figure C-1. Please identify them in Figure C-1.

Figure C-1, attached, has been revised to add labels that identify the unidentified and former aeration basin outfalls.

31. Table C-1, Outfalls "Aeration Basin" and "Unidentified Pipe" are not identified in Figure C-1. Please identify them in Figure C-1

Figure C-1 has also been revised to label the aeration basin and unidentified pipe.

32. Table C-2 - These outfalls are not identified in Figure C-I. Please identify their locations in Figure C-1.

The approximate location of the unknown outfalls has been added to Figure C-1.

33. Page D-1, Background and Objectives, Paragraph 2 - Please identify what "moderate stresses" are.

The text will be changed to reflect the response to comment 10: ***In the interim, the banks will be stabilized to limit erosion by re-vegetation and/or placement of well-graded 6-inch D50 river-run stone or similar material as approved by the engineer.***

34. Pages D-1 and D-2 - The erosion mitigation for Zone A provides for equal or greater stability than the pre-excavation slope while in Zone B erosion mitigation provides greater stability for pre-excavation slope. Please explain the cause for this disparity.

Text will be changed to make the statement on Zone B the same as that for Zone A as follows: ***If disturbed, the bank will be graded to a shape and angle that has equal or greater stability than the pre-excavation slope.***

Comment Letter Dated October 15, 2007

1. The current design of the residual containment pad calls for a 40 mil LLDPE liner between two layers of sand. The USEPA is concerned the 40 mil LLDPE liner could be punctured during operation with this current design. Please consider methods (e.g. adding felt to the top and bottom of the LLDPE liner) to prevent puncture.

The liner will be exposed to some stresses from material placement but not extensive truck traffic. As such, a 40 mil LLDPE liner was specified due to it flexibility under various stresses as well as its strength and durability. The LLDPE liners have the ability to elongate under stress, allowing them to maintain their integrity under localized differential settlement conditions without puncturing, tearing, or cracking. The LLDPE also has a superior resistance to low temperatures and ultraviolet exposure which may be expected at the Plainwell Mill site.

Once the containment pad area is cleared, RMT will inspect the bottom for suitability to support placement of the liner material. If soft or compressible areas are encountered or there are objects such

as concrete or stone which are impractical to remove, the design may be adapted to include placement of a geofabric over the existing ground surface prior to placing sand. We do not plan to have truck traffic on any of the liner system.

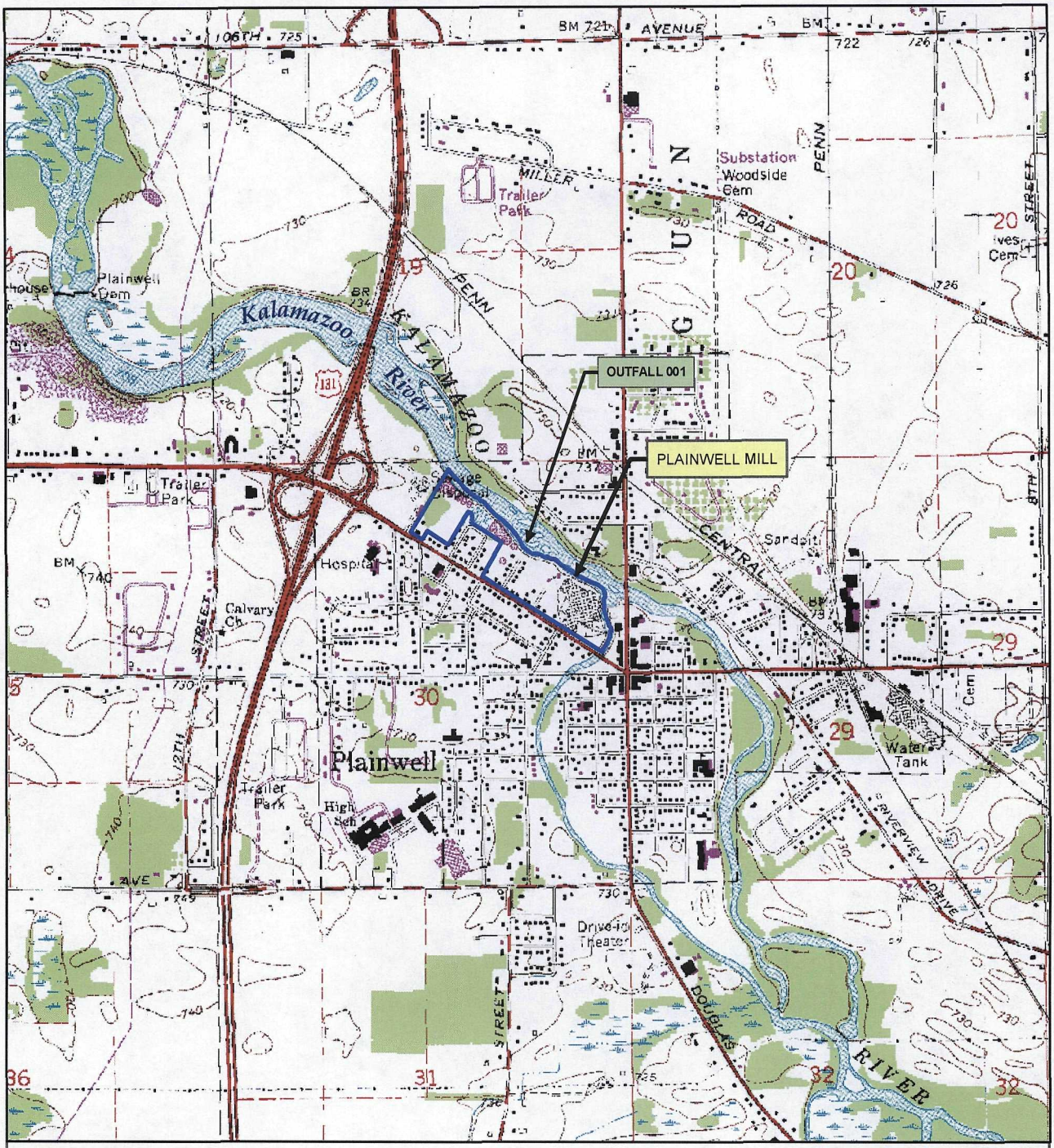
We appreciate your prompt feedback on these comment responses. The team and I look forward to rapid resolution of these issues so that we can continue the Plainwell Mill Bank Emergency Action tasks. Please contact me at 253-924-3746 if you have any questions.

Sincerely,

Weyerhaeuser Company

Jennifer Hale
Environmental Manager

cc: Paul Bucholtz, MDEQ
Eileen Furey, C-14J
Michael Berkoff, SR-6J
Jim Saric, SR-6J
Erik Wilson, City of Plainwell
Kathy Huibregtse, RMT, Inc.



BASE MAP FROM USGS 7.5 MINUTE QUADRANGLE, OSTEGO, 1967, REVISED 1973.

RMT
744 Heartland Trail
Madison, WI 53717 - 1934
P.O. Box 8923
Madison, WI 53708 - 8923
Phone: 608-831-4444
Fax: 608-831-3021

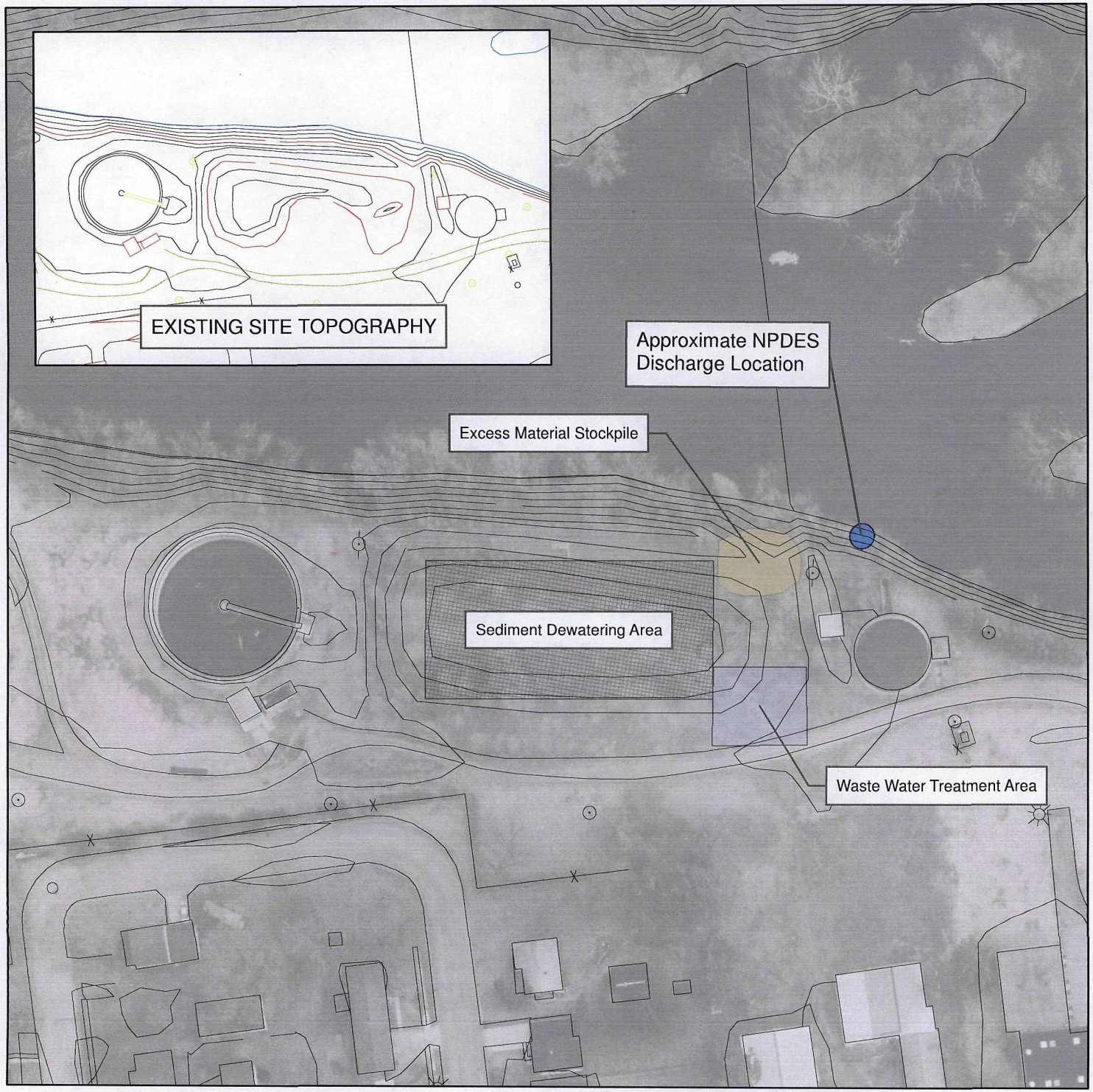
SITE LOCATION MAP

PLAINWELL MILL BANKS EMERGENCY ACTION
PLAINWELL MILL
PLAINWELL, MICHIGAN

DRAWN BY:	PYLKAS E
APPROVED BY:	
PROJ. NO.:	00-05130.03
FILE NO.:	51300301
DATE:	AUGUST 2007

D:\05130\03\51300301.mxd 8/29/2007 15:00:31

FIGURE 1



Legend

- Excess Material Stockpile
- Sediment Dewatering Area
- Waste Water Treatment Area
- Approx. NDPES Discharge Location

NOTES

1. Containment Pad will consist of 3"-6" of sand with 40 mil LLDPE liner system.
2. LLDPE will be covered with an additional 6" of sand to allow equipment access.
3. Wastewater within the dewatering pad will drain towards the wastewater treatment area andpumped to a holding tank prior to treatment.

0 50 100 200 Feet

1 inch equals 100 feet

PROJECT:
WEYERHAEUSER COMPANY
KALAMAZOO RIVER SUPERFUND SITE

SHEET TITLE:
PROPOSED SEDIMENT CONTAINMENT AREA
(PROPOSED GRADES)

DRAWN BY: WEBER N	SCALE: AS NOTED	PROJ. NO.:	00-05130.03
CHECKED BY:		FILE NO.:	51300304.mxd
APPROVED BY:	DATE PRINTED: 10/8/07	FIGURE E-1	
DATE: OCTOBER 2007			

RMT
150 N. Patrick Blvd., Suite 180
Brookfield, WI 53045-5854
Phone: 262-879-1212
Fax: 262-879-1220

D:\05130\03\GIS\51300304.mxd

LEGEND

- STORM WATER OUTFALL
- PROCESS WATER OUTFALL
- PROCESS OUTFALL 005 - APPROX. LOCATION
- FORMER PRIMARY CLARIFIER - APPROX. LOCATION

NOTES

1. LOCATIONS ARE BASED ON HISTORICAL PERMIT FILES, ENGINEERING DRAWINGS, AND RMT'S SITE OBSERVATIONS.

2. STORM SEWER AND PROCESS OUTFALL PHOTOGRAPHS WERE TAKEN BY RMT DURING A FIELD VISIT THE WEEK OF 7/16/07.

0 200 400 Feet

1 inch equals 200 feet

N W E S

PROJECT:
WEYERHAEUSER COMPANY
PLAINWELL MILL BANKS EMERGENCY ACTION

SHEET TITLE:
STORM WATER AND PROCESS WATER OUTFALLS

DRAWN BY: PYLKASE	SCALE: AS NOTED	PROJ. NO.:	00-05130.02
CHECKED BY:		FILE NO.:	51300202
APPROVED BY:	DATE PRINTED: 10/16/2007 DRAFT FINAL	FIGURE C-1	
DATE: OCTOBER 2007			

RMT
150 N. Patrick Blvd., Suite 180
Brookfield, WI 53045-5854
Phone: 262-879-1212
Fax: 262-879-1220